Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556 SI

Sheet 1 of 26 Express Mail No.: EV328104817US

Serial No.: Not yet assigned Attorney: Russell T. Manning

Phone: (720) 562-5502

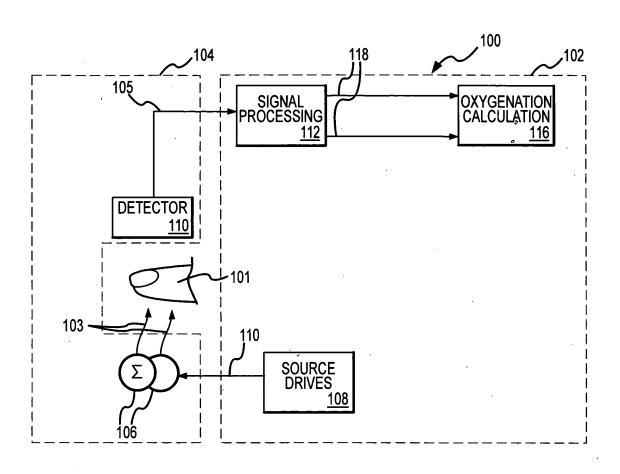


FIG.1

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."

*Inventor: BEKKER -Attorney Docket No. 41942-05556

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Sheet 2 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

2/26

DETECTOR OUTPUT V. TIME

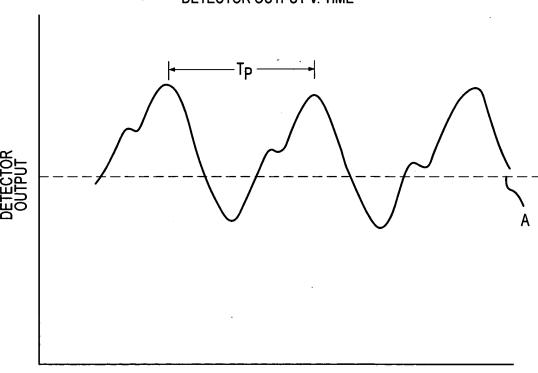


FIG.2

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..." Inventor: DEKKER •

Sheet 3 of 26

Attorney Docket No. 41942-05556 Serial No.: Not yet assigned

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Attorney: Russell T. Manning

LOW FREQUENCY
PLETH VARIABILITY POWER SPECTRUM

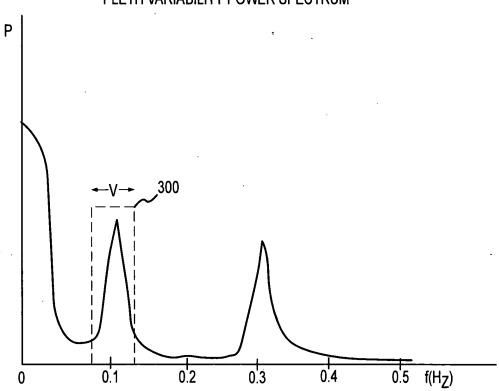


FIG.3

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER •
Attorney Docket No. 41942-05556

Serial No.: Not yet assigned Attorney: Russell T. Manning

Sheet 4 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

4/26

PLETH POWER SPECTRUM

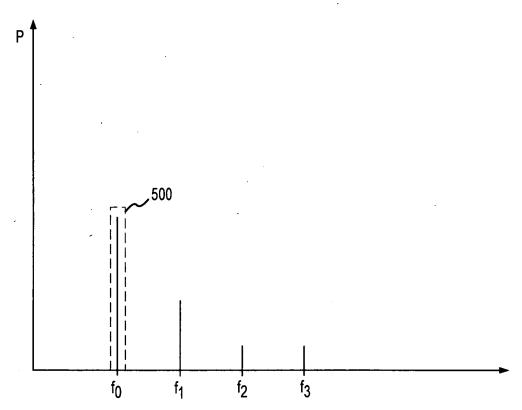


FIG.4

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."

Inventor: DEKKER Attorney Docket No. 41942-05556

Sheet 5 of 26 Express Mail No.: EV328104817US

Serial No.: Not yet assigned Attorney: Russell T. Manning

Phone: (720) 562-5502



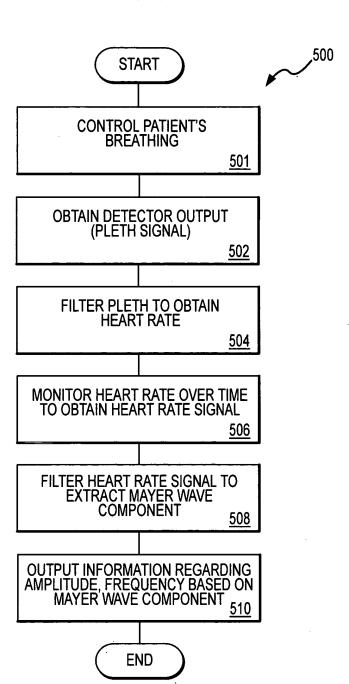
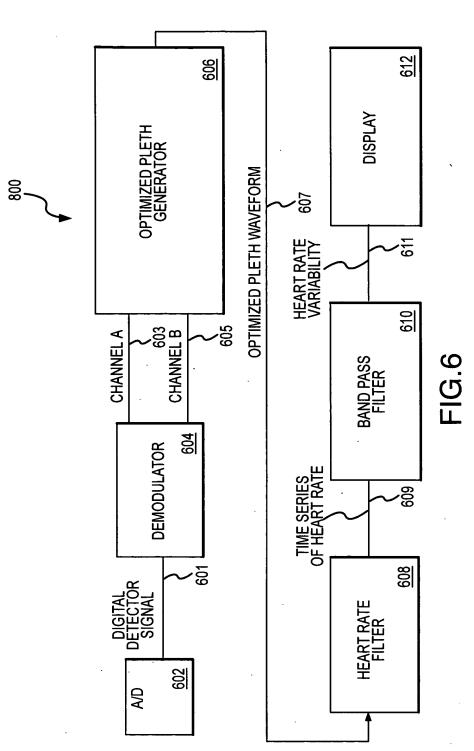


FIG.5

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
Serial No.: Not yet assigned
Attorney: Russell T. Manning
Phone: (720)

Sheet 6 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

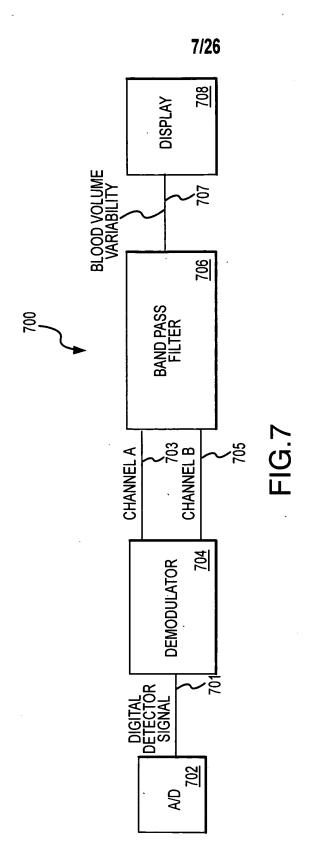
6/26



Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
SI

Sheet 7 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

Serial No.: Not yet assigned Attorney: Russell T. Manning



Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER

Sheet 8 of 26

Attorney Docket No. 41942-05556 Serial No.: Not yet assigned Attorney: Russell T. Manning

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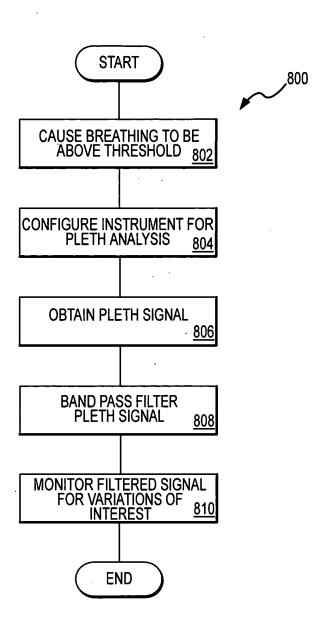
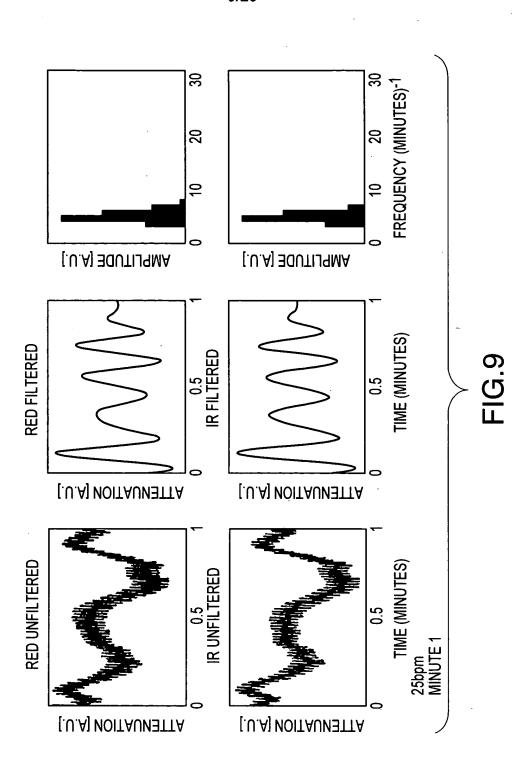


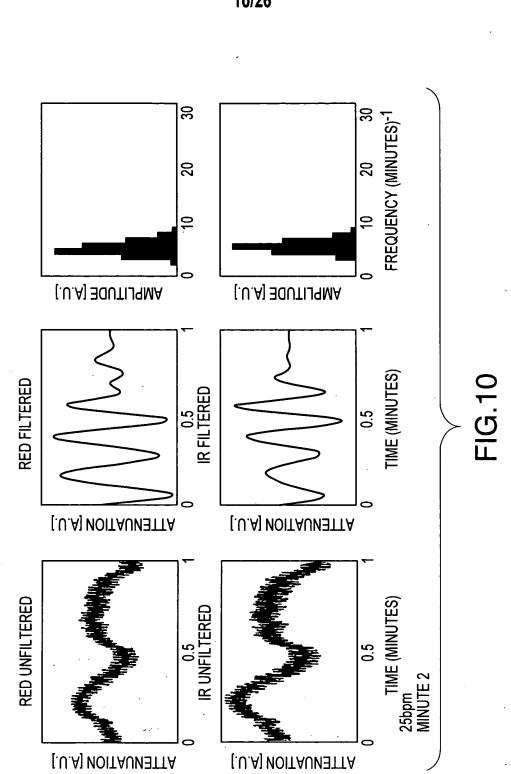
FIG.8



9/26

Sheet 9 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
Serial No.: Not yet assigned
Attorney: Russell T. Manning
Phone: (720

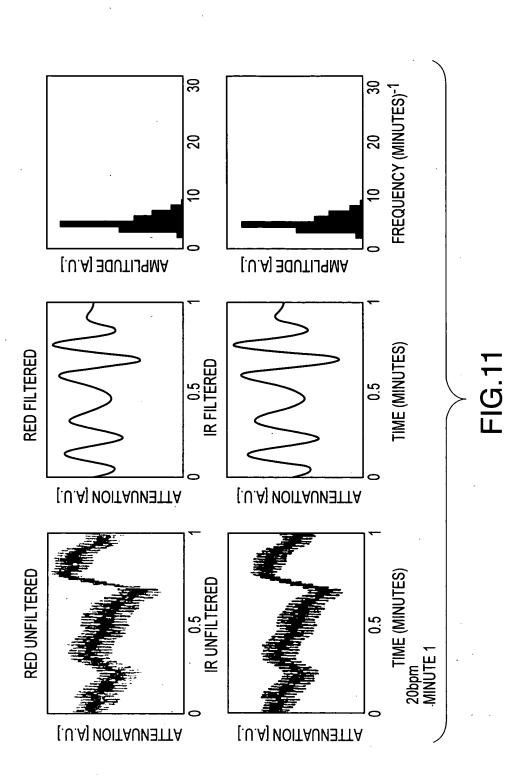


10/26

Sheet 10 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556 Sho

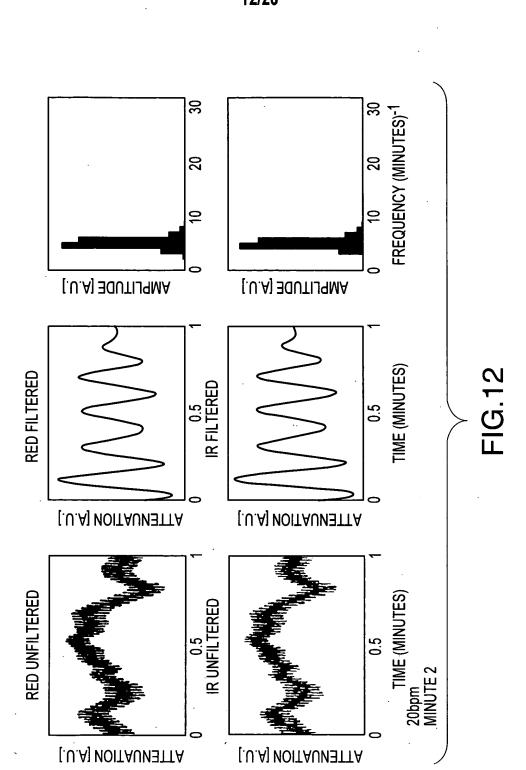
Serial No.: Not yet assigned Attorney: Russell T. Manning



11/26

Sheet 11 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

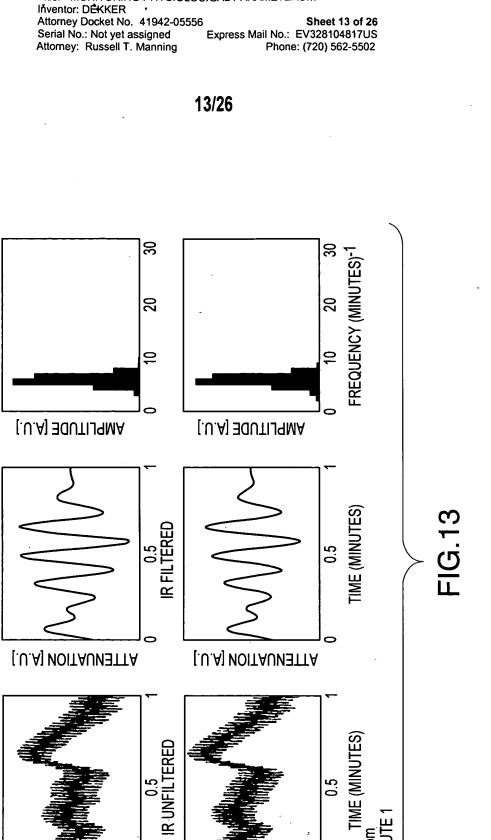
Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
Serial No.: Not yet assigned
Attorney: Russell T. Manning
Phone: (720)



12/26

Sheet 12 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
Serial No.: Not yet assigned
Attorney: Russell T. Manning
Phone: (720)



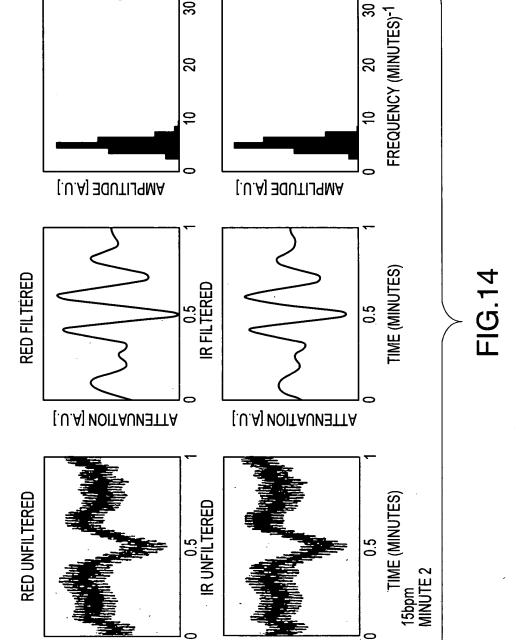
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[.U.A] NOITAUNETTA

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."



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14/26

Sheet 14 of 26

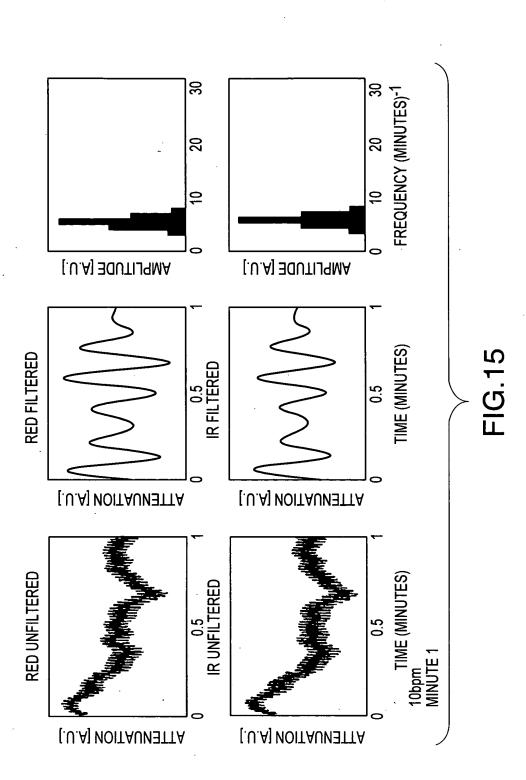
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Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
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Serial No.: Not yet assigned Attorney: Russell T. Manning

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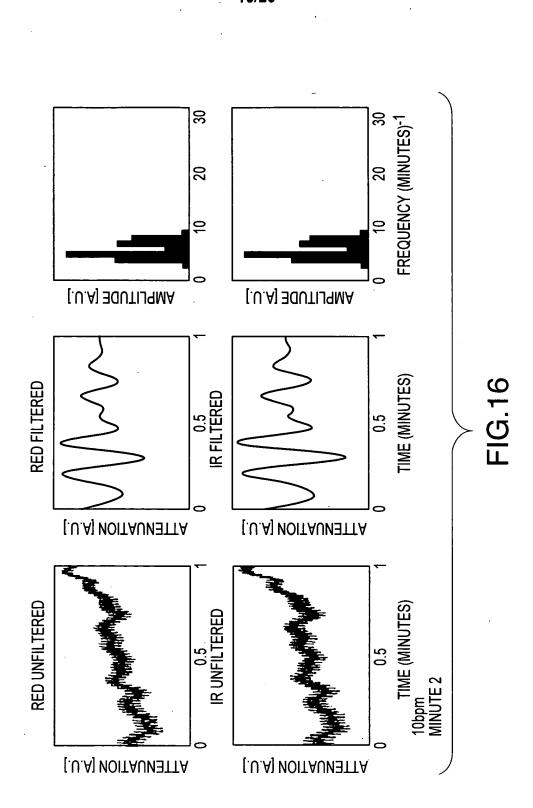


15/26

Sheet 15 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556 Sh

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16/26

Sheet 16 of 26

Phone: (720) 562-5502

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Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556 She
Serial No.: Not yet assigned Express Mail No.: EV32
Attorney: Russell T. Manning Phone: (720)

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
Serial No.: Not yet assigned
Attorney: Russell T. Manning
Phone: (720)

Sheet 17 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

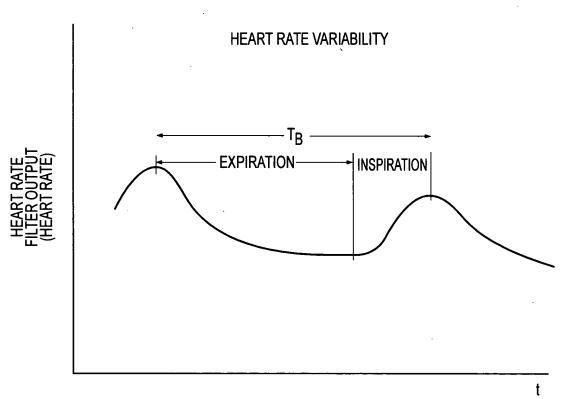


FIG.17

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556 She
Serial No.: Not yet assigned Express Mail No.: EV320
Attorney: Russell T. Manning Phone: (720

Sheet 18 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

18/26

RESPIRATORY POWER SPECTRUM

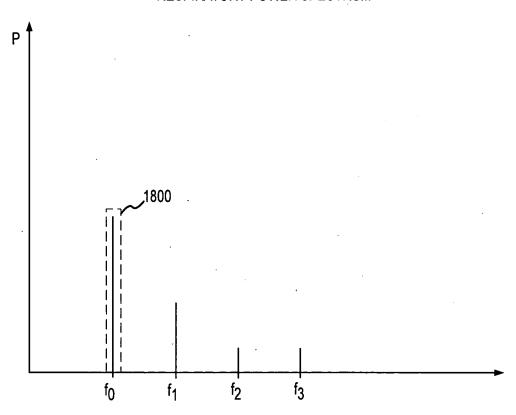


FIG.18

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..." Inventor: DEKKER

Attorney Docket No. 41942-05556

Sheet 19 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

Serial No.: Not yet assigned Attorney: Russell T. Manning

19/26

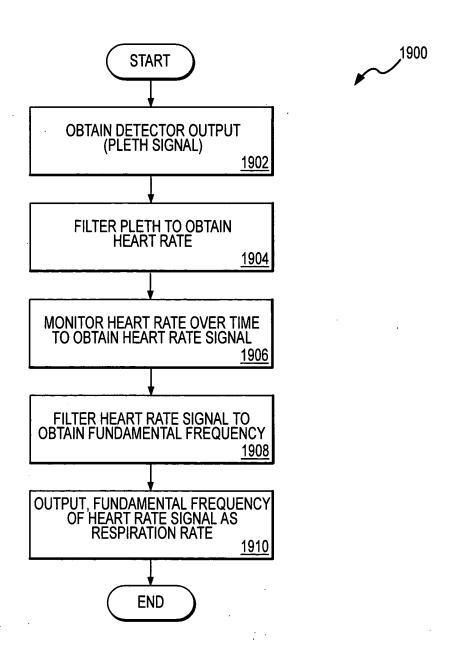


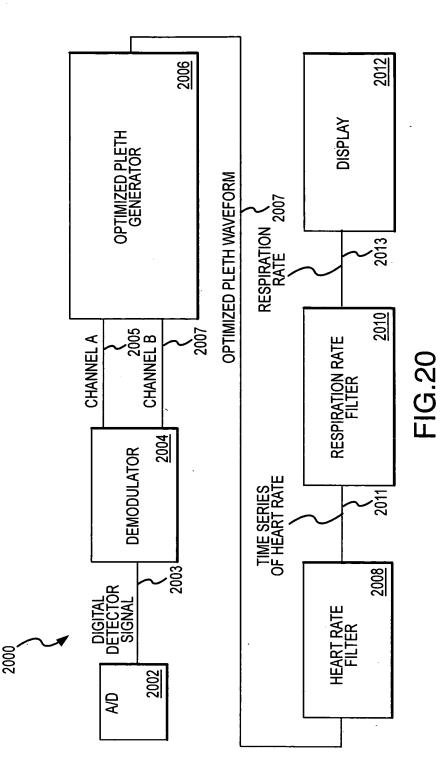
FIG.19

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
Serial No.: Not yet assigned
Attorney: Russell T. Manning
Phone: (720)

Sheet 20 of 26

Express Mail No.: EV328104817US Phone: (720) 562-5502

20/26



Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER

Sheet 21 of 26 Express Mail No.: EV328104817US

Attorney Docket No. 41942-05556 Serial No.: Not yet assigned Attorney: Russell T. Manning

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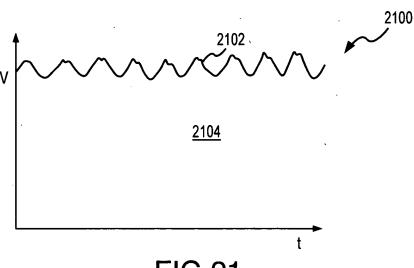


FIG.21

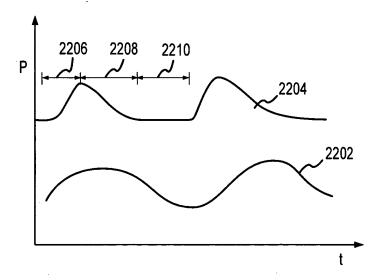


FIG.22

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
Senal No.: Not yet assigned
Attorney: Russell T. Manning
Phone: (720)

Sheet 22 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

22/26

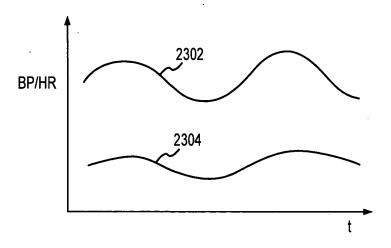


FIG.23

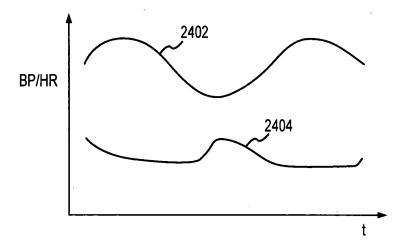


FIG.24

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."

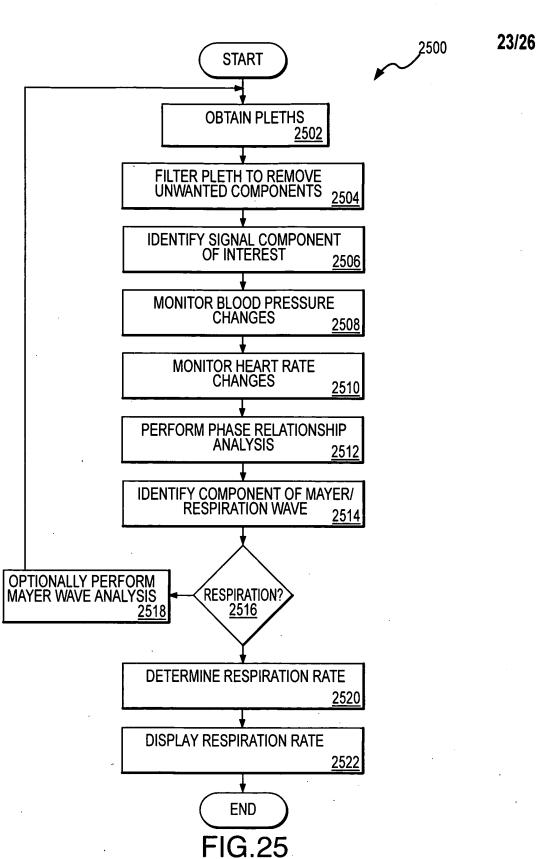
Inventor: DEKKER

Attorney Docket No. 41942-05556

[®]Sheet 23 of 26 Express Mail No.: EV328104817US

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Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..."

Inventor: DEKKER CAttorney Docket No. 41942-05556

Sheet 24 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

Serial No.: Not yet assigned Attorney: Russell T. Manning

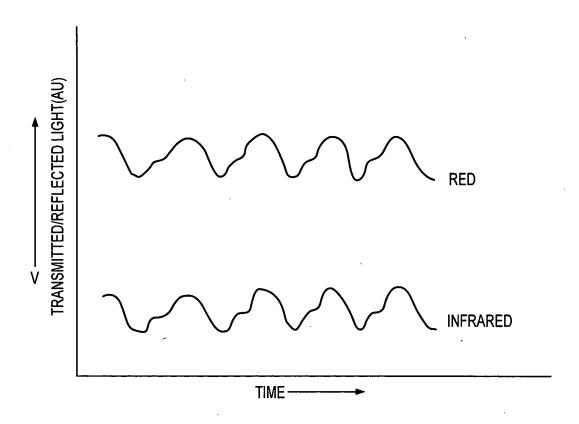


FIG.26

Title: "MONITORING PHYSTOLOCIGAL PARAMETERS..."
Inventor: DEKKER
Attorney Docket No. 41942-05556
Sho

Sheet 25 of 26 Express Mail No.: EV328104817US Phone: (720) 562-5502

Serial No.: Not yet assigned Attorney: Russell T. Manning

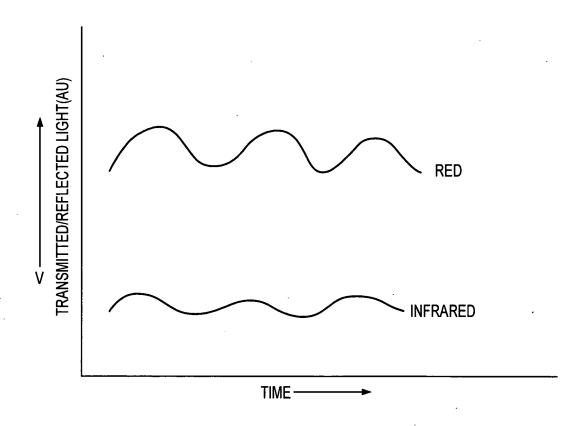


FIG.27

Title: "MONITORING PHYSIOLOCIGAL PARAMETERS..." Inventor: DEKKER Attorney Docket No. 41942-05556 **Sheet 26 of 26** Express Mail No.: EV328104817US Serial No.: Not yet assigned Phone: (720) 562-5502 Attorney: Russell T. Manning 26/26 ILLUMINATE TISSUE 2800 MEASURE INTENSITY OF LIGHT **RELATIVE TO TISSUE** 2802 TRANSMIT DETECTOR SIGNAL TO MONITOR 2804 A/D CONVERT DETECTOR SIGNAL 2806 FILTER DIGITAL SIGNAL TO SEPARATE RED AND INFRARED WAVE FORMS 2808 CALCULATE BLOOD OXYGEN LEVELS USING RED AND INFRARED **WAVE FORMS** 2810 FILTER RED AND INFRARED WAVEFORMS TO ISOLATE AC AND DC COMPONENTS 2812 CALCULATE DC COMPONENT RATIO **OF RATIOS** <u>2814</u> CALCULATE EXTINCTION COEFFICIENTS 2816 CALCULATE HbO2/Hb RATIO

FIG.28

2818

<u>2820</u>

MONITOR HbO2/Hb FOR RESPIRATION CYCLE